



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,216	02/20/2002	Yan Belavsky	910/2	9726

24101 7590 07/02/2003

BRUCE E. LILLING  
LILLING & LILLING P.C.  
P.O. BOX 560  
GOLDEN BRIDGE, NY 10526

EXAMINER

ROSENBAUM, MARK

ART UNIT	PAPER NUMBER
----------	--------------

3725

DATE MAILED: 07/02/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

BEST AVAILABLE COPY

**Office Action Summary**

Application No.

10/080,216

Applicant(s)

BELIAVSKY, YAN

Examiner

Mark Rosenbaum

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-15,18-63 is/are rejected.
- 7) ☒ Claim(s) 3-5,16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 3-5, 16, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 112***

Claims 6-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no proper antecedent basis for claim 7, lines 5-6 'said at least one functional insert'. In claim 6, line 2 is confusing and should be rewritten.

### ***Claim Rejections - 35 USC § 102***

Art Unit: 3725

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,19,20,22,24-27,30,53,55,57,58,60,61 are rejected under 35

U.S.C. 102(b) as being anticipated by Coombe. This patent discloses a vortex mill including air inlets 3 which would result in the claimed perturbations.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,228,40,56,59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombe. The limitations of these claims would have been obvious modifications by one of ordinary skill in the art once the basic apparatus and process was known. For example, the use of freely movable elements is well known in the grinding art and of no patentable merit.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombe as applied to claim 1 above, and further in view of Andrews '991. Coombe does not use two outlets which results in inefficient comminution. Andrews solves this problem by disclosing similar apparatus including the use of two outlets for more efficient comminution. In order to provide for more efficient comminution, it would have

been obvious for one of ordinary skill in the art to modify Coombe by providing two outlets, taught to be desirable by Andrews '991. Any remaining limitations would then have been obvious design choices as they solve no stated problems.

Claims 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombe as applied to claim 1 above, and further in view of Schurr. Coombe does not use recesses in his wall to aid in comminution. Schurr solves this problem by disclosing similar apparatus including the use of wall recesses. In order to aid comminution, it would have been obvious for one of ordinary skill in the art to modify Coombe by providing wall recesses, taught to be desirable by Schurr. Any remaining limitations would then have been obvious design choices as they solve no stated problems.

Claims 39,54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombe as applied to claim 1 above, and further in view of Ruzicka. Coombe does not use generating means to aid in comminution. Ruzicka solves this problem by disclosing similar apparatus including the use of generating means. In order to aid comminution, it would have been obvious for one of ordinary skill in the art to modify Coombe by providing generating means, taught to be desirable by Ruzicka.

Claims 23,41-43,62,63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombe as applied to claim 1 above, and further in view of Andrews '319. Coombe does not use a baffle opposite the inlet nor does he use a series of chambers, both features aiding material comminution. Andrews '319 solves this problem by disclosing similar apparatus including the use of a baffle and chambers in series. In order to improve comminution, it would have been obvious for one of ordinary

skill in the art to modify Coombe by providing a baffle opposite the inlet and a series of chambers, taught to be desirable by Andrews '319. Any remaining limitations would then have been obvious design choices as they solve no stated problems.

Claims 44-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coombe as applied to claim 1 above, and further in view of Beliavsky. Coombe does not provide baffles on the side wall to aid in comminution. Beliavsky solves this problem by disclosing similar apparatus including the use of side wall baffles. In order to aid comminution, it would have been obvious for one of ordinary skill in the art to modify Coombe by providing side wall baffles, taught to be desirable by Beliavsky. Any remaining limitations would then have been obvious design choices as they solve no stated problems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Rosenbaum whose telephone number is 703-308-1788. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Ostrager can be reached on 703-308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3579 for regular communications and 703-305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Application/Control Number: 10/080,216  
Art Unit: 3725

Page 6

A handwritten signature in black ink, appearing to read "Mark Rosenbaum". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Rosenbaum  
Primary Examiner  
Art Unit 3725

MR  
June 25, 2003